COALITION FOR CLEAN AIR

To: CARB Staff
From: Shankar Prasad, Tim Carmichael
Coalition for Clean Air
(shankar@coalitionforcleanair.org)
Cc: Economic and Technology Advancement Advisory Committee
Board Members
Re: Comments on Protecting and Benefiting Impacted Communities in the Draft Scoping Plan
Date: August 11, 2008
Via: Electronic Submission at
http://www.arb.ca.gov/cc/scopingplan/spcomment.htm

Coalition for Clean Air (CCA) commends the staff for the comprehensive nature of the Draft Plan that recommends a broad array of GHG emission reduction measures to achieve the targets set by AB 32. Our comments here focus on two major concerns – protecting and providing benefits to the most impacted communities and quantifying the impacts.

Community Benefits

Historically, U.S. and state regulations have focused on either reducing criteria pollutants (or their precursors) and toxics to improve the air quality at a regional level or reducing the risk at the fence line from a source. The number of sources in a given area is not typically a primary consideration in the permitting process. Thus, there are many geographical areas generally referred to as "hot spots" with a high percentage of low-income and minority populations that are impacted by exposure to many chemicals from multiple nearby sources. Hence, recognizing the likelihood of increasing disproportionate and cumulative impacts in such communities as a result of GHG emission reduction efforts, AB 32 requires its regulations and compliance mechanisms:

- do not disproportionately impact low-income communities;
- consider the potential for direct, indirect and cumulative emission impacts in communities that are already impacted by air pollution;
- prevent any increase in the emissions of toxics or criteria pollutants; and
- direct public and private investment toward the most disadvantaged communities.

This language in the statute clearly indicates the need to focus on real-life conditions and consider exposure from multiple pollutants and facilities. It is also reflective of the fact that although air quality has improved over time in a regional context, all communities have not experienced the same level of improvement, as evidenced by recent risk assessments conducted by CARB. In addition, it is clear that no back sliding (no increase in pollution) should be allowed and low-income communities must not only be protected but they should benefit from the implementation of AB 32.

In its current version, the Plan does not explain how CARB plans to meet or address these requirements. In this regard CCA urges CARB staff to consider a framework that includes: a) using cumulative impacts screening to identify these communities; b) placing limitations on facilities located in these areas to participate in a trading scheme; c) dedicating a fixed percentage of revenues generated from any market-based approach to create a Community Benefits Fund; and d) requiring entities that purchase allowances or offsets to contribute to the Community Benefits Fund. The document detailing this framework is attached.

We are particularly concerned that Cal/EPA is working on a much slower time line for developing guidelines on cumulative impacts assessment than is needed. At the recent CCEEB Summer Issues Symposium OEHHA Director Joan Denton reported that a report on cumulative impacts would not be completed until the summer of 2009 and guidance to industry on how to conduct cumulative impact assessments would come a few years later. This is inconsistent with AB 32 requirements. In addition, there is an urgent need to have uniformity and consistency among the state, air districts and other local governments to ensure that communities identified as impacted by one does not get categorized

differently by another. The final Scoping Plan needs to include a schedule for action on this issue to ensure that any regulation to be adopted can undergo its evaluation in this context prior to its adoption by the Board.

CCA is also concerned that failure to have a plan to meet this primary intent and requirement of the law could lead to litigation of any future regulation that gets adopted and could delay emissions reduction timeframes.

Climate Change Impacts and Co-benefits

CCA commends the efforts made to quantify co-pollutant reduction and estimated health benefits associated with co-pollutants (NOx and PM) reduction associated with 2020 GHG emission reduction targets. CCA urges CARB staff to include the estimates of potential direct health impacts of climate change in the final version of the plan.

The magnitude of impacts seen in California during summer 2006 (one of the top five hottest years on record) is shown in the following Table.

Impacts of Heat Wave During Summer of 2006

(July 15 – Aug 1)	
Excess deaths from all causes	**615**
Heat-related deaths (typical 10-12 deaths)	**145**
Excess ER visits	**16,166**
Heat-related ER visits (typical 400 visits)	**2537**
Excess hospital admissions	**1182**

Source: Preliminary results –
California Dept. of Public Health

Such episodes are very likely to recur and continue until global warming trend changes, which will be dependent on actions taken at the local, state, national and international levels in the near future. Thus, low-income urban communities and rural areas in the Central Valley containing higher percentage of residents of color, are at risk from adverse effects of increased temperatures and heat waves, as they lack air-conditioning, capacity to travel from impacted areas for relief as well as access to community-level programs.

CARB should include these impacts into the economic modeling because the economic benefits of GHG reductions would be significantly higher than currently projected in the Plan. In addition, it is as important to invest in adaptation programs as in emission reduction programs to help both the affected communities and the local governments cope with episodic impacts most likely to recur due to global warming. The type of programs that need to be undertaken will differ significantly depending on the geographical location and the local needs of a community.

In addition to the above concerns, CCA shares the same view as many other environmental organizations in terms of: a) increasing the target reductions from local government actions and regional GHG targets; b) taking proactive steps to promote high speed rail and reduce VMT; c) taking firm actions to ensure a 33% RPS; d) evaluation of all market mechanisms to the same extent as done for the Cap And Trade Program; and d) modifying the Cap and Trade Program Design elements of the Plan. Relative to Cap and Trade, we urge CARB to modify the major elements as follows:

1) allowances should be auctioned;
2) auction revenue should be used in the public interest;
3) if allowed, offsets should account for no more than 10% of the reductions to be achieved, not 10% of emission allowance; and
4) revenue generated should assist in emission reduction efforts and adaptation measures to most impacted communities and local governments.

Photo: Low-income community in Sacramento, CA.

Conceptual Framework to Lessen the Impacts on Communities

When Shaping Market-Based Mechanisms to Reduce GHGS

by Shankar Prasad and Tim Carmichael

Historically, U.S. regulations have focused on either reducing criteria pollutants (or their precursor emissions) and toxics to improve the air quality at a regional level or reducing the risk at the fence line from a source. The number of sources in a given area is not typically a primary consideration in the permitting process. Thus, there are many geographical areas generally referred to as "hot spots" with a high percentage of low-income and minority populations that are impacted by exposure to many chemicals from multiple nearby sources.

California Assembly Bill No. 32 (AB 32—the California Global Warming Solutions Act of 2006)[1] recognizes this problem and requires the California Air Resources Board (CARB) to consider the potential for direct, indirect, and cumulative emission impacts on communities that are already affected by air pollution, and prevent any increase in the emissions of traditionally controlled pollutants. This nationally heralded California law to curb greenhouse gases (GHGs) is now approaching its implementation phase. It requires the state to reduce GHG emissions to 1990 levels by 2020. This translates to a projected 28% reduction in emissions (or 173 million metric tons of carbon dioxide-equivalent [CO_2e]).[2] AB 32 also requires CARB to prepare and approve a scoping plan on or before January 1, 2009. The plan will identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for GHG emission sources and categories of sources that CARB finds are necessary.[3]

Two of the three advisory committees set up to make recommendations on the implementation phase of AB 32 support a cap-and-trade program.[4,5] In this context, CARB is poised to adopt a market-based mechanism as one component of its overall strategy for reducing GHG emissions to 1990 levels by 2020. In a recent paper, University of San Fransisco professor Alice Kaswan states that, "CARB must remain cognizant that such a market-based system, if created, is a means to an end, not an end in itself. Focusing

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exclusively on market-related parameters for success, such as generating the most trades, or the lowest costs, or the easiest system to administer, could undermine the state's achievement of other key goals, including … protecting already-burdened communities from additional pollution [and] achieving environmental cobenefits through copollutant reductions."[6]

To achieve these objectives and the requirements, as well as the intent of the law (AB 32), a concept that may be considered includes a cumulative and disproportionate impacts assessment to identify the geographic areas that bear a higher air pollution burden, limitations on facilities located in these areas to participate in any market-based approach, and dedicating a portion of the revenue generated from any market-based approach to reduce climate or air pollution impacts in the identified areas. These elements can be included whether California or the United States ultimately chooses a carbon tax, an auction, a cap-and-trade program (or any other fee mechanism), or any combination of these approaches. The following is a summary of a concept developed by the authors of this article and supported by the American Lung Association of California, the Latino Issues Forum, and the Bay Area and San Joaquin Valley Air Quality Management Districts.[7]

Concerns and Challenges

Disproportionate Impacts

The magnitude of climate change impacts (i.e., acute, chronic, direct, indirect) is higher for low-income communities in all parts of the world. On a global scale, the harmful effects of climate change include extreme heat, water shortages, flooding, more violent weather, and increased incidence and spread of disease. The higher incidence of mortality among elderly and lower income groups have been well documented during the heat episodes observed in Chicago and France in recent years. The magnitude of impacts seen in California during summer 2006 (one of the top five hottest years on record) is shown in Table 1. Such episodes are likely to recur until the global warming trend changes, which will be dependent on actions taken at the local, state, national, and international levels. Heat episodes are also known to increase the magnitude of air pollution and associated adverse impacts.

In addition, lower income populations are disadvantaged by being unable to allocate the necessary resources to prepare their homes and themselves to avoid acute impacts of climate change and/or recover from the aftermath of acute episodes because of a lack of resources necessary to recuperate themselves and repair or rebuild their homes. Thus, it is as important to invest in adaptation programs as in emission reduction programs to help both the affected communities and the local governments cope with episodic impacts most likely to recur due to global warming. The type of programs that need to be undertaken will differ significantly depending on the geographical location and the local needs of a community.

Localized Impacts or Cobenefits

Most experts agree that approaches and technologies currently available (i.e., improving combustion and energy efficiency, product substitution, capturing emissions) will also simultaneously reduce the traditionally regulated air pollutants to some extent, thus providing cobenefits to nearby communities and the region. In a market-based approach, a source participating in an emission trading system or an offset-based program would continue its emissions at current levels by purchasing credits elsewhere. Thus, a community near such a source would continue to bear a higher burden of pollution exposure and not receive any associated cobenefits relative to a source reducing its emissions. A similar outcome would be expected under a carbon-tax scenario, whereby sources that are willing to pay a higher amount of carbon tax simply pass on the added cost to their customers instead of reducing emissions at the source.

Excess deaths from all causes	615
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Table 1. Impacts of California heat wave during summer 2006 (July 15–August 1). *Source:* California Department of Public Health.

Legal Requirements

Recognizing the likelihood of increasing disproportionate and cumulative impacts in some communities, as a result of GHG emission reduction efforts, AB 32 requires that market-based regulations and compliance mechanisms

- do not disproportionately impact low-income communities;
- consider the potential for direct, indirect, and cumulative emission impacts in communities that are already impacted by air pollution;
- prevent any increase in the emissions of toxics or criteria pollutants; and
- direct public and private investment toward the most disadvantaged communities.

This language in the statute is a clear indication of the intent in terms of the need to focus on real-life conditions and consider exposure from multiple pollutants and facilities. It is also reflective of the fact that although air quality has improved over time in a regional context, all communities may not necessarily experience the same level of improvement, as evidenced by recent risk assessments conducted by CARB.[8] In addition, it is clear that no back sliding (i.e., no increase in pollution) should be allowed and low-income communities must not only be protected, but they should benefit from the implementation of AB 32.

Public Skepticism

In California, there is widespread and long-standing skepticism about emission trading, including, but not limited to, environmental justice and community-specific concerns. Failures in other programs, such as the South Coast Air Quality

Management District's RECLAIM[9] program and the European Emissions Trading System,[10] have only validated these concerns. In contrast, a majority of California's decision-makers are either not familiar with—or are still debating the level of success achieved by—the Acid Rain and NO_x Budget Programs that employed a cap-and-trade system as a compliance mechanism and reduced the cost of compliance.[11] The reasons for the failure and/or success of these programs are reasonably well documented. However, public concerns, along with different perspectives on these programs, have resulted in a lack of consensus about the design and scope of a market-based approach as part of California's strategy to reduce GHG emissions.

Another fundamental concern expressed by some quarters is that allowing emission trading will reflect a willingness of society to trade the well-being of one segment of the population for the prosperity of another. Hence, it is incumbent on any GHG emissions reduction program to ensure that the communities continuing to bear the higher pollution burden will participate in and benefit from these GHG reduction efforts.

Potential Solution

The concept suggested for consideration here[7] focuses on providing health and resource benefits to those communities that face a higher magnitude of climate change impacts and currently have a disproportionately higher air pollution burden within their air basin. The concept includes using cumulative impacts screening to identify these communities, placing limitations on facilities located in these areas to participate in a trading scheme, dedicating a fixed percentage of revenues generated from any market-based approach to create a Community Benefits Fund, and requiring entities that purchase allowances or offsets to contribute to the Community Benefits Fund.

To protect disproportionately impacted communities from a potential increase in their pollution burden and to decrease emissions in such communities, agencies can ensure a structured consideration of cumulative emissions and impacts. To achieve this goal, the Cumulative Impacts Screening methodology,[12] developed by a research project sponsored by CARB and California Energy Commission, can be employed as a common screening tool to identify communities or geographical areas that already have higher pollution levels.

One approach to protect these highly impacted communities would be to preclude all sources in these heavily polluted areas from participating in any trading system. This ensures incremental reduction in emissions resulting in incremental benefits and cobenefits to the most vulnerable population. Should economic or technological reasons prevent a facility from reducing emissions in the beginning, an alternate approach would be to allow that pollution source to temporarily participate in an emissions trading system, but require it to meet additional criteria, such as (a) assuming that all facilities purchasing allowances or offsets will pay a fee, require facilities in highly impacted communities to contribute twice the amount of fee toward a community benefits fund; (b) work with the community or communities potentially affected, the city, residents, and the local air district to develop a community benefits agreement that can be implemented and enforced; and (c) meet a certain level of actual reductions before being allowed to continue to purchase (after the first time) emission credits or offsets.

Thus, a funding stream can be created and earmarked for community benefits to help address existing disproportional impacts, mitigate localized impacts, improve energy efficiency, or provide for rebates or adaptation for climate change impacts. This fund would receive an initial allocation of revenues generated from the auction of allowances, carbon tax or fees as recommended by the Economic and Technology Advancement Advisory Committee.[5] In addition, the fee charged to a facility participating in any trading or offset program would be dependent on its location. The latter can act both as a deterrent to emitting GHGs and co-pollutants and an incentive to invest in control measures for reducing emissions.

The Community Benefits Fund created by a market mechanism must not to be viewed as cash vouchers for individuals in a specified geographic area, but rather as a resource for taking action within the area to reduce exposures or risks related to climate change or air pollution. While statewide parameters must be established, a public process should ensure that the community plays an active role in determining how the fund will be used and what type of projects will be funded.

Summary

Incorporating such a concept in the design phase of any market-based mechanism acknowledges that the risk of emission trading could result in cumulative and incremental increases in exposure burden in already over-polluted communities, accepts the responsibility to prevent or minimize the impacts at a community level, and treats communities as partners in a market-based approach to reduce GHGs. **em**

References

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